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(54) HEAT-RESISTANT ALKALI CELLULASE GENE

(57)Abstract:

PROBLEM TO BE SOLVED: To obtain the subject new heat-resistant enzyme gene producible a heat-resistant alkali cellulase capable of mixing with a detergent for clothing, etc., in a large amount, comprising a heat-resistant alkali cellulase gene encoding a specific amino acid sequence.

SOLUTION: This new heat-resistant alkali cellulose gene encodes an amino acid sequence of the formula or an amino acid sequence wherein one or several amino acids are deleted, substituted or added and is useful for a heat-resistant alkali cellulase capable of formulating with a detergent for clothing, etc., in a large amount. The gene is obtained by separating a genome DNA from *Bacillus* sp. KSM-S237 strain by a normal method, performing a genome PCR by using a partially base sequence of a cellulase gene and cloning.

Val Val Ile Asp Lys Thr Lys Glu Ile Ser Ile Ser Thr Pro Ile Ala Leu Ala Ala Lys Lys Cys
 5 10 15
 Ile Val Ile Leu Ile Ser Leu Thr Pro Ile Ala Leu Ala Ala Lys Lys Cys
 20 25 30
 Asn Thr Arg Glu Asp Asn Met Tyr His Leu Leu Cys Asn Asp Ile Val
 35 40 45
 50
 Glu Ile Glu Asp Tyr Lys Glu Glu Ile Glu Glu Glu Lys Glu Glu Lys
 55 60 65 70 75 80 85
 Glu Glu Val Lys Glu Glu Lys Lys Glu Asp Ile Lys Glu C-Lys Lys Ala
 90 95 100 105 110 115 120
 Val Lys Asn Cys Ala Lys Lys Lys
 125 130

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